REPUBLICAN RIVER COMPACT ARBITRATION BEFORE MR. KARL DREHER, ARBITRATOR

Republican River Compact
Arbitration

Deposition of MARV SWANDA, taken pursuant to notice at 1:31 p.m. on April 7, 2009, at the offices of the United States Bureau of Reclamation, 203 West Second Street, Grand Island, Nebraska.

APPEARANCES

For the State of Nebraska: JUSTIN D. LAVENE

Assistant Attorney General

Counsel of Record MARCUS A. POWERS

Assistant Attorney General

2115 State Capitol Lincoln, NE 68509

THOMAS R. WILMOTH Special Assistant Attorney General

HUSCH BLACKWELL SANDERS LLP 206 S. 13th St., Ste 1400

Lincoln, NE 68508

For the Bureau:

JOHN C. CHAFFIN Attorney Advisor

Office of the Solicitor 316 N. 26th St., Ste 5018

Billings, MT 59101

Kelly S. Horsley ACE Reporting, NE (402) 416-4882

A P P E A R A N C E S (CONT'D)

For the State of Kansas: JOHN B. DRAPER

Special Assistant Attorney General

MONTGOMERY & ANDREWS, P.A.

325 Paseo de Peralta Santa Fe, NM 87504-2307

For the State of Colorado: PETER J. AMPE

First Assistant Attorney General

Federal and Interstate

Water Unit

Natural Resources and Environment Section 1525 Sherman Street,

5th Floor

Denver, CO 80203

_ _ .

ALSO PRESENT: BRIAN DUNNIGAN, Director, Nebraska Department of Natural Resources District.

OTHERS PRESENT BY TELEPHONE: DALE BOOK, PE, Consultant for Kansas, Spronk Water Engineers

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I N D E X

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14	Correspondence to M Swanda from Brad Edgerton dated 6-2 (3 pages)		43		Appendix
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STIPULATION:

It is stipulated and agreed by and between counsel for the parties in this action that all statutory requirements as to certificate, mode of transmission, notice, notice of filing and the presence of the witness during the extension of the testimony are hereby expressly waived.

It is further stipulated that all objections as to form, foundation and responsiveness shall be made at this time or otherwise deemed waived; all other objections will be reserved until time of trial.

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Kelly S. Horsley ACE Reporting, NE (402) 416-4882

REPORTERS CERTIFICATE:

State of Nebraska)
)ss.
Lancaster County)

I, KELLY S. HORSLEY, certified reporter and a Notary Public duly commissioned, qualified and acting under a general notarial commission within and for the State of Nebraska, certify that MARV SWANDA, appeared before me and was first sworn to testify the truth, the whole truth and nothing but the truth; that this deposition was reported by me and taken pursuant to the stipulation and hereinbefore set forth; that I am not counsel, attorney or relative of any of the parties or otherwise interested in the event of this suit; and that the following pages reflect truly, accurately and completely the recording of this proceeding.

IN TESTIMONY WHEREOF, I have hereunto set my hand officially and attached my notarial seal at Lincoln, Nebraska, this ____ day of April, 2009.

Notary Public

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1 PROCEEDINGS:

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THE REPORTER: Raise your right hand and I'll swear you in. Do you swear the testimony you're about to give today will be the truth, the whole truth, and nothing but the truth, so help you God?

MR. SWANDA: I do.

MARVIN SWANDA

_____Called as a witness on behalf of the State of Nebraska, having first been duly sworn, testified as follows:

DIRECT EXAMINATION

BY MR. WILMOTH:

Q Good afternoon, Mr. Swanda. May I call you Mr. Swanda, or is there a doctor in there or anything that I need to know about?

A No.

Q All right, very good. Thank you for coming this afternoon. We appreciate your attendance.

And, again, Mr. Chaffin, I thank you for making Mr. Swanda available to us.

Before we get too far down the line, did I assume for the sake of this deposition that the authorization is essentially concurrent with that authorization that was held by Mr. Thompson with regard to what we can address, and what cannot be addressed?

Okay, thank you. And this was issued by whom?

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- A I believe it's Mike Ryan, Regional Director.
 - Q Mr. Swanda, what's your personal and professional background, generally?
 - A Okay. My background, I am a agriculture engineer from South Dakota State University.
 - Q When was that received?

A That was in 1973. And I worked with the South Dakota Department of Natural Resources, '75 to 1980; and in 1980 I transferred to the Bureau of Reclamation in Huron, South Dakota. I was in a planning group that included hydrology on different projects. And in '91, or excuse me, 1981, July, I transferred to the McCook field office, which is under the, now, Nebraska-Kansas area office in McCook; transferred down there as a hydraulic engineer working in the operations branch it was called at that time. I was in that capacity until 1985 I believe it was, when I was appointed the Chief of Facilities Maintenance in the same office.

I was in that capacity until 1995 when I was reassigned as the Water Operations Chief, back to the same group that I was in when I initially came there, I became the chief of that group; '95 until, I think 2001 when I was appointed the McCook Field Office Manager over all of those said activities that I had worked in prior to that, and I remain in that position today.

	Marv Swar	nda direct	<u>Z</u>
1	Q	So you are currently the McCook Field Office	
2	Manager?		
3	А	Yes.	
4	Q	Backing you up just briefly, with regard to	
5	your worl	k at the South Dakota Natural Resources	
6	Departmen	nt, what was the nature of that work?	
7	А	I was in the environmental section of that	
8	group.		
9	Q	And what did those tasks typically entail?	
10	А	Mostly dealt with waste water treatment plants	3,
11	those kir	nds of things and	
12	Q	Permitting?	
13	А	Yes. And also there was a it was called a	
14	208 Proje	ect, I think, non-point runoff-type of	
15	activitie	es.	
16	Q	Water quality management issues, generally?	
17	А	Yes, yes.	
18	Q	As they related to waste water treatment	
19	plants?		
20	А	Yes.	
21	Q	And when you were in the planning division at	
22	the Burea	au in Huron, I believe you mentioned that you	
23	were invo	olved in some hydrology planning?	
24	А	Yeah. It was	
25	0	What did that involve?	

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- A We had several groups, and then there was, oh, whatever you call it, probably five or six planning studies going, and so we provided the -- I was responsible for the hydrology related to those studies.
- Q Are these water supply projects that were being planned?
- A Typically they were irrigation projects, that kind of thing.
- Q Are these -- Were they new projects, or were they expansions to existing facilities?
 - A No, they were projects that were being planned.
 - Q So they were new projects?
 - A Yes.
 - Q Did any of those come to fruition?
- A I believe there was a couple of those that did. There was a transfer of the functions from that office at that time, to the regional office in Billings, and I think the studies continued up there.
- Q And then you transferred to the McCook field office as a Hydraulic Engineer; is that right?
 - A Hydraulic Engineer, right.
- Q And in that capacity, generally, what were your obligations?
- A The main operations was the branch was set up with a supervisor and several -- two engineers as

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operators that we were involved in the operations of all of our projects throughout the Nebraska-Kansas area, and we had the responsibility, the direct operations on 11 of the projects, which all of those in the Republican River Basin were in that bunch.

Q And did that deal principally with surface water hydrology or groundwater hydrology?

A No, it was strictly surface water dealing with the reservoirs in our irrigation districts and contracts.

Q Do you have any background or degrees or expertise you have collected over the years in groundwater modeling?

A Not that I could really mention, I don't believe. Pretty much on the periphery of that kind of activity.

THE REPORTER: Pretty much what?

THE WITNESS: On the periphery.

THE REPORTER: Thank you.

Q (By Mr. Wilmoth) And I believe you said in 1985 you were reassigned to be in charge of water operations?

A Yeah, it was the original group that I reported to McCook in, I became the supervisor in that group, which was the Water Operations Chief.

Q And was that essentially in charge of turning

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dials, for lack of a better word; figuring out how much water came down the system; how much was retained; how obligations were met?

A Yeah, it was strictly water operations related to all of the Nebraska-Kansas area projects. There was 15 dams and reservoirs.

Q So that would include the -- I'm sorry, strike that. Were you here for the earlier testimony of Mr. Thompson?

A Yes.

Q Would that include the facilities that Mr. Thompson talked about, generally, in the Basin?

A Yes, I believe so.

Q Okay. Can you tell me a little bit about those facilities. Pensively, what I am interested in learning from you is your view about how those facilities need to be operated, either as a unit or individually to meet the project purposes.

A Okay. In the -- my time there and experience related to those projects, there have been times we have gone back and reviewed the Definite Plan Reports, DPRs that were referenced earlier as to how the projects were all laid out. And back in the '40s and the '50s when these plans were put together, the intent was that basically there would be a sharing of water throughout

the Basin, but as to --

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Q You mean among the projects?

A Yeah, the original theory was that is that there could be. But as it evolved, the intent -- and there's language in the DPRs that speaks to a particular reservoir being related to a particular irrigation district project. That was ultimately what was envisioned, I believe, that we weren't going to be transferring water from one reservoir to another. For example, each one somewhat stood alone to support the project that was associated with it.

Q Is that true with regard to all projects, or are there individual projects where that decision has been made?

A No, I think that's how they've been operated throughout the history that I am aware of.

Q All the projects are individually operated to serve one customer --

A One or two districts depending on which ones are associated with those reservoirs.

Q So let's just walk down the system, and if you could briefly identify which facility serves which district?

A Okay. And did you want me to address Bonny in Colorado?

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- Q Yes, I would like that, please.
 - A Okay. I will kind of do the same as Aaron did earlier, move from the west to the east.
 - Q Would you care to refer to this, or you probably already have it in the back of your mind.
 - A I think I probably know it. Bonny Reservoir, northeastern Colorado, first, as Aaron indicated, they're all multipurpose reservoirs in the Republican River Basin. They all have probably an irrigation function associated with them originally, for sure, and they all have flood control pools.
 - Q Now, were those the two original authorizations or were they always multi-use?
 - A They were always -- That was their authorized purpose.
 - Q Under the '44 Act?
 - A Yes. And Bonny, specifically, it was envisioned there would be a small irrigation district associated with it. That never came to be.
 - Q Why is that?
 - A I think there was just never support -- from what I understand there was never support gathered out in that area to go ahead and -- you know, it's quite a process for a group or people to get a district put together; an interest in it, and I don't think ever -- it

Marv Swanda -- direct 10 never came to pass out there. 1 2 0 No local, political support, you mean, for that 3 project? 4 Right, yes. Α 5 Was there sufficient water supply to justify a 6 project, in your view? 7 I believe there probably was, initially. It would have been, I would say, assuming the district was 8 9 not, you know, over -- too large or that kind of thing, 10 it would have supported an irrigation function. Not a 11 large district, certainly. 12 Assuming that there were local support today, 13 is there any reason why that district could not be formed 14 and served? 1.5 There would -- In my view, there would be no --16 There's no water supply to support --17 To what do you attribute that? 18 I attribute that to the inflows and reservoir 19 levels that we have documented and observed over the last 20 20 years, 30 years. 21 And do you believe that those inflows are 22 the -- those declining inflows are the result of some 23 activity in Colorado? 2.4 Α I do.

What activity is that?

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- A I think to a large extent they're related to groundwater development.
 - Q Anything else?
- A There could be some depletions related potentially to conservation activities; to what extent, that I don't know, but --
- Q Okay. So that facility principally serves what purpose if there is no irrigation function?
- A What happened -- What transpired out there, is, I believe in 1982 the State of Colorado expressed an interest of purchasing the conservation space in the reservoir solely for the purpose of recreation, fish and wildlife activities out there. And so really the demand, for the most part, from any irrigation function went away at that time.
 - O Do you know what was paid for that?
 - A I think --
 - Q How much money, I mean?
- A Yeah, I think what they -- I believe, if I remember correctly is that they paid off the capital -- the debt related to the water supply, and I believe it was in the neighborhood of three million dollars, something near that.
- Q But the Bureau still holds title to those facilities; is that right?

Marv Swanda -- direct 12 Α Yes, that's correct. 1 2 0 And do you make releases at the direction of the State of Colorado then? 3 4 Α Yes, we do. 5 And was this same situation replicated 6 elsewhere in the Basin? At Norton Reservoir, for 7 example? What -- Down at Norton there is a -- as I 8 Α 9 recall it's a short-term lease of some storage space in 10 there by the State of Kansas. It's not a long-term 11 contractual relationship. Do you know how long the duration of that lease 12 13 is for? 14 Α I'm -- I think it's somewhere in the five-to-1.5 ten year range. I don't remember exactly. I think it 16 might be ten years, but --17 Is that also for recreation and wildlife, 18 principally? 19 That's their purpose. Now there is still some 20 irrigation allowed out of their reservoir levels, reach certain levels in there. That's in their agreement with 21 the State, the District -- between the State and the 22

And was there a payment made for that lease?

There was to the irrigation district.

District.

Q

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Marv Swanda -- direct 13 0 And did the Bureau receive any enumeration for that? Not to my knowledge. How did that affect the repayment structure of 0 that project? I don't think it had a -- The only affect it would have would -- to assist the district in paying their outstanding bills and that kind of thing. Okay. So the district received money and then they turned around and paid that to the Bureau for O&M? Α Yeah, we would have a -- we would collect, as we do with all of them if we have a contract. We would collect a share of the operation and maintenance expenses related to those facilities. How often during the term of this lease has irrigation occurred at that facility? I believe -- without looking and digging through my records here, but I believe there was some water released last year, and I don't recall the year before.

Q For irrigation purposes?

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A Yes. It was a very minor amount. The district typically, they are very frugal with their supply there.

Q Do they also have groundwater supplies available to them?

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1 A I believe they do.

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- Q Has groundwater pumping in that area impacted the project at all?
 - A Above the reservoir?
 - O Above the reservoir.

A It may have to some extent, but it's typically that drainage basin is fairly narrow, so there's -- from a hydrologic standpoint it's not wide where it collects up a lot of runoff so there -- it's been somewhat limited from the initial construction of the dam. But there are probably ground water effects, and I really can't speak to what those might be, but --

- Q Have you witnessed declining inflows into that facility?
- A Yes, we have. It hasn't been as pronounced as other facilities.
- Q Would it be fair to assume that the decline in those inflows would be attributable potentially to groundwater pumping and conservation practices the same as with Bonny?
 - A I believe that would be a true statement.
- Q I'm sorry I interrupted you, but I'd like, if you would to continue, please, down the system?
- A Okay. I'll move straight down from Bonny to Swanson Lake, Trenton Dam. That's on the -- I guess I

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failed to mention Bonny's on the South Fork of the Republican. Swanson is on the main stem of the Republican River. Out of Swanson, we supply irrigation water to the Frenchman Cambridge Irrigation District. They have three reservoirs that they use for their canal systems. There is a canal directly off of the dam, off Trenton Dam, Meeker-Driftwood Canal that we supply water too.

And then we also -- historically, we released water to the river from the dam, that is ultimately picked up at one of the diversion dams located downstream; either Bartley Diversion Dam or Cambridge Diversion Dam, which are both Frenchman Cambridge Irrigation District supply points.

Q And about how much ground is irrigated in Frenchman Cambridge?

A I think they have a total acreage of, I'm going to say 45,000, I believe is the number. And they have -- Water is delivered to them through four different canal systems.

Q And you've witnessed a decline to inflows to that project also?

A Yes, it's been rather significant. I would point to, and I don't know what page it is in the -- some of the information we've provided, but we've outlined in

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there on all of our reservoirs the DPR averages; what was envisioned and then we've done a comparison of the inflows to those particular reservoirs. And as of the last period, we would -- we're looking at 28 percent of what was envisioned, originally.

- Q And you attribute that again to groundwater pumping? Now is that -- Am I correct about that?
 - A Yes.
- Q And do you attribute that to groundwater pumping in Nebraska or groundwater pumping in Nebraska and Colorado, or groundwater pumping in Nebraska, Colorado and Kansas, or some combination thereof?
 - A It's probably a combination thereof.
- Q Okay, and if you could proceed to the next facility.

A Okay. Over to the Frenchman Creek is Enders Reservoir. That supplies water to two irrigation districts that -- they are Princeton Valley Irrigation District and the H&RW Irrigation District, the diversion point for both of those districts at the same diversion dam at Palisade, Nebraska, which is approximately 50 to 60 miles downstream of the dam, so we would make releases -- storage releases from the dam to supplement the natural flows down at that point.

And probably Enders is one that we've noticed

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the most significant decline in inflows.

- Q And to what do you attribute that decline?
- A I think, to a large extent, it's the groundwater development above Enders.
- Q Again, I assume this is some combination of pumping in the three states?
- A Yes, I would -- Well, in this case, it would be Nebraska and Colorado.
- Q Were you here earlier when Mr. Thompson talked about the water supply -- I'm sorry -- pardon me, the water service contract for H&RW?
 - A Yes, I was.
- Q And if that's a water service contract, does that mean that H&RW is not technically a Reclamation project?
- A I don't think that's what that means. It means that contract -- it was redone in the early '80s.

 There's references in the contract about the significantly declining inflows in their water supply, and so the contract was changed to a water supply contract. And what that means, it's -- their payments -- it's based on available water knowing the water supply was declining.
- Q Now you say it was changed, does that mean it was changed from the standard Reclamation repayment

	Marv Swanda direct 1
1	contract?
2	A I believe that's correct.
3	Q Under the 1902 Act?
4	A Yes, I believe that's correct. And when that
5	was changed, I believe their capital debt was relieved.
6	Q So there's no outstanding debt attributable to
7	any infrastructure within H&RW?
8	A I think that's correct. There could be
9	there's a possibility there could be some on their
10	distribution works. I'm not totally familiar with that
11	for sure, but
12	Q And by debt, I should have clarified, I meant
13	federal debt.
14	A Yes.
15	Q And if water is not available to H&RW, does
16	H&RW have any recourse as against the Bureau?
17	A No, not that Now there's probably clauses in
18	the contract that we indicate that we are not responsible
19	for water shortage, that kind of thing.
20	Q And those clauses actually are embedded in the
21	standard Reclamation retainment contracts too; are they
22	not?
23	A I believe that's correct. And in the case of
24	H&RW, that would be how the contract is set up is that

unless there is six inches of water available to the

	Marv Swanda direct 19
1	farm, they don't pay the United States the O&M for that
2	particular year.
3	Q I see.
4	A So in most years we do not receive a payment
5	from them.
6	Q And do you recall how frequently between the
7	time of construction, and say, 2000, water was delivered
8	and paid for to H&RW?
9	A I believe I'm thinking they received water
10	possibly one time.
11	Q One time since the construction of the
12	facility?
13	A No, since didn't you say 2000?
14	Q I'm sorry. My question was between the
15	construction of the facility and 2000, approximately how
16	many times have they received water? And I don't expect
17	you to have that at your fingertips necessarily, if
18	you've got a ballpark idea; 50 percent of the time, 75
19	percent?
20	A Okay, I'd say prior to 2000 they probably
21	received water 75 percent of the time, at least.
22	Q There would be a Bureau record somewhere that
23	would reflect the actual number there, I assume?
24	A Yes, it's actually I think it's in
25	Q In the materials?

A Yes.

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- Q Are those materials that were provided to us?
- A Yes, I believe they are in one of the other records, I believe it's question one, or whatever.
 - Q So let's continue down the system then, please.
- A Okay. And one thing I might just reference on those two districts, the Frenchman Valley has an 1890 right, and H&RWs much a junior, so their natural flow doesn't help them out much anymore.
- Q And these priority dates are priorities afforded them under state law?
 - A Yes, that's correct.

Proceeding down the line, Red Willow Dam, Hugh
Butler Lake are located on Red Willow Creek north of
McCook there; supplies water also to the Frenchman
Cambridge Irrigation District. Located just downstream
of that facility is Red Willow Diversion Dam; supplies
water to the Red Willow Canal, something in the
neighborhood of 5,000 acres, something like that. And it
also supplies water to the Bartley Diversion Dam which is
located on the main stem of the Republican River. So
there's two places water can be brought to the Bartley
Diversion Dam is from Swanson Lake, or Hugh Butler Lake.

Proceeding on down the Basin, Harry Strunk Lake, located north of Cambridge. That is the third

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reservoir that supplies water to the Frenchman Cambridge Irrigation District. That is a reservoir that is one of the few -- actually the one that almost fills every year out of all of these we will be talking about. Its got a good supply of inflow, and I think its enhanced by the some of the imported water comes into that facility now.

Q Is this what people sometimes in Nebraska refer to as the groundwater mound?

A Yes, I believe that's correct. And so there's a good water supply in Harry Strunk that we can supply one to a canal for Frenchman Cambridge Irrigation

District. That's the Cambridge Canal located just east of Cambridge, Nebraska.

And moving downstream is Harlan County Lake, which is the Corp of Engineers facility. United States holds the entire water right in that facility, the Bureau of Reclamation does. We are responsible for the irrigation function of that quota facility. There's, I think, 150,000 acre-feet of storage in there for irrigation purpose. We supply two irrigation districts' water out of that facility; it's Nebraska Bostwick Irrigation District and then the Kansas Bostwick Irrigation District, located in Kansas. So that facility we work collaboratively with the Corp of Engineers. We split the water supply in there, make a determination as

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to which district -- how much of that water supply belongs to each district in any given year.

- O And how is that determination made?
- A What we do is we have what's called a consensus plan with the Corp of Engineers and the Bureau of Reclamation, and that plan is contained -- I think it's an attachment to the FSS. What that document does, it describes exactly the procedure that we use on an annual basis working with the Corp on how we determine how much irrigation supply is available. And we do an estimate in January to give the districts an idea what they could be expecting when the season rolls around, and then we firm that supply up as best as we can at the end of May.
- Q So the -- you provide the districts a projection in January; is that what you said?
- A Yes. And we indicate to them how much water they -- it's kind of a minimum conservative approach kind of a thing. It gives them an idea going in. You know, it certainly can change depending on how the spring turns out, but --
 - Q And so that's your first projection?
 - A Yes.
- Q And the second projection is provided in what year, I mean what month?
 - A Okay. We do this in January, and then we --

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when the end of May rolls around, we see where we're at, and then we adjust that up. If it ends up the end of May and the water supply is actually less than we predicted, we have a procedure where we can proceed below the irrigation pool in Harlan County to make sure we get at least the amount we told them was available.

Now it is limited by a reservoir elevation. If it gets down so low, we can only go down, we can't -- we can only go down to 1927.

Q So when you say proceed below irrigation pool, you mean below what's the standard pool?

A Right. There's a sediment pool located below, and so we have agreed with the Corp that when we miss our projection, it turns out to be less than we thought, we can drop down into that sediment pool and make up the difference.

Q And how often does that happen?

A I think it happened -- I don't know how many times, but it has happened in the early 2000s, I believe. And that was when our -- we used a projected inflow, and that was when our inflows were significantly less than what we were using for an estimate. So that --

- Q And why did -- Why were the inflows significantly less?
 - A I think it's partly -- it's to a large extent

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related to the declining water supply upstream. There were certainly dry conditions. Certainly 2002 was a very bad year from just a precipitation-type year. So I think it's a combination of both. And as projects upstream, we're not operating because of the same reason we weren't seeing the return flows, those kind of things coming upstream.

Q And those upstream projects are not used to provide any flow support obviously for these lower projects; is that?

A That's correct. The benefit from operating the projects upstream is the return flows that you see from those projects and that was --

Q From the application of irrigation water?

A That's correct. And I would certainly anticipate it in the DPRs, that that would occur.

Q How much return flow, generally, was anticipated in the system?

A I don't know if I can give you a number. There was certainly a reference to it in our DPR documents, and it's somewhat dependent on which project you may be talking about. But I think one of the numbers was used, was 75 percent of the difference between the canal diversions and the farm deliveries. And I believe some of that was used in the accounting procedures in the

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Q And I infer from your comments that these return flows, estimates, are not panning out?

A No. As you have projects upstream that don't operate because of short water supplies, then the return flows from those projects are not there to enhance the stream flow as it moves downstream, so --

Q Let's continue on down the system.

A Okay. In conjunction with Harlan County, we have another reservoir that we operate, I don't know if you call it in tandem but it's in -- it's also another source of supply for the Kansas Bostwick Irrigation District, so we operate -- the Bostwick division includes both of the Bostwick Districts, Kansas and Nebraska.

at; Harlan County; we look at Lovewell the other reservoir in Kansas, the supply that's in there; we look at the stream flows in the Republican, above and below Harlan County. We look at the stream flow in Prairie Dog, which Lovewell Reservoir is located on, so using all those variables, we -- that's all cranked in to determine the available water supply for both districts. And the theory is that out of all those acres, both districts, we will share that supply as equal as we can, supplying the same amount to each acre.

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Q And you're talking about the supply that's available in Harlan and Lovewell?

A Yes. And the more water we have in Lovewell shifts some of the supply in Harlan to the Nebraska District. But in Lovewell, you can only serve so many at acres that are located above Lovewell, and there's probably around 19,000 acres above Lovewell that are relying on flows from the Republican or Harlan County.

- Q 19,000 acres above Lovewell; is that what you said, I'm sorry?
 - A Yes, I think that's roughly the number.
- Q Thank you. And I'm interested in the movement of water between Harlan County and Lovewell. When does that occur?
- A What we'll do -- and it all depends on any given year what the conditions are, but what we'll do if it's a dry situation, we will attempt to fill, refill -- our goal is to use as much as the storage as we can in Lovewell, you know, given the irrigation season.
 - Q When you say use, do you mean draw down?
- A Yes, draw all the storage that's available for irrigation. And what that does is it preserves some of the supply in Harlan County. One of the theories is to keep as much water upstream as you possibly can, you know, don't move it down until you absolutely need it.

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So on the off-season, if it's a dry period, and there were in the 2000s, we ran -- we can divert water out of the Republican through the Courtland Canal into Lovewell to refill it in the off-season.

- Q In the off-season?
- A Yeah.
- Q So this is outside the irrigation season?
- A Yes.

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- Q Okay.
- A And we certainly do that so the more water we can get into Lovewell, the less we need from Harlan County to go down there. We want to supply all --
 - Q In the next irrigation season, for example?
- A Right, yes. But when we need to -- you cannot supply all of the acres, a full supply just from the storage of Lovewell. So on a typical year --
- Q Excuse me, when you say all of the acres, do you mean all of the acres in KBID?
 - A No.
 - Q Or all of the acres below Lovewell?
- A All of the acres below Lovewell.
- Q Thank you.
 - A If you have just Lovewell storage, that will not -- that will supply somewhere in the neighborhood of six inches of water. So in a normal operation season, we

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will bring water through Lovewell on downstream in order to equalize all of the acres to get -- say if you have a nine-inch supply we're shooting for, you have to bring three more inches of water equivalent to that amount through Lovewell Reservoir from Harlan County, or from natural flows in the Republican River. And our attempt as always, is to equalize the deliveries as best as we can.

Q And do you have a sense since 2000, how often you have run water to Harlan County to Lovewell during the non-irrigation season?

A I believe we probably have done that in all the years except for the last two, I'm thinking, two-to-three, probably.

Q So roughly from 2000 to 2006?

A Yeah, that would be my -- Yes. It's kind of a different -- We hadn't really done the winter-type operation for -- I wouldn't say we never have done that over the years, but I think recently is the first time we have done that to replenish Lovewell in the winter time. Typically we would be able to do that in the spring, but due to low flows, we've resorted to running through the winter.

Q Okay. And just to be clear, I think I understand the answer, but, there are no other facilities

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on the system that are operated in this same manner?

Essentially, in tandem to support one another?

A No. Right, yeah, that's correct, other than Frenchman Cambridge has three reservoirs that you can supply water for more than one of the reservoirs.

Q And that's done?

A It is done depending on how much water we've got in any of the two upstream reservoirs.

Q And earlier on you mentioned that, at some point, the original idea was to run these reservoirs as a unit?

A Yes.

Q But that changed. I'm trying to understand, did that change between what Congress envisioned in the '40s and what the DPR said later, or was it after the DPRs were written, or --

A I don't think it changed. Did you get that --

Q I'm sorry. I thought that you said earlier that the original idea was --

A The original idea was -- when they started out very early on was that there would be a need to share the water supply throughout the basin, and I think once the projects were set up, then, you know, pretty much they were determined they wouldn't be moving water from one reservoir to a downstream one for a water shortage, that

Marv Swanda -- direct 30 1 they would pretty much stand alone at that -- you know, 2 once they got on further down the road. 3 And that's after the DPRs are completed? That's correct. And I think it's documented in 4 Α 5 the DPRs. 6 0 Okay. Are the DPRs ever amended or revised? 7 No, those were the original and final plans, I mean, there were different versions, but there was --8 9 they're the planning documents for the federal projects. 10 And let's talk just for a moment if we can 11 about your knowledge of the hydrology of the Republican River Basin. 12 13 Α All right. 14 Were you here when I asked Mr. Thompson about, 1.5 generally, what comprised the water components of the 16 Republican River? 17 Α Uh-huh. 18 Do you know the answer to that question? Q 19 I don't know that I could give a numerical 20 I believe originally there's a significant 21 portion -- was base flows that were related to 22 groundwater.

And when you say originally, do you mean pre-

Yes, pre-development, and early on until

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development time?

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probably into the '60s in looking at our flows, inflows to our reservoirs and other stream flow data. They pretty much matched up with the planning documents as to what was expected, and I think certainly there are some -- there are runoff components, probably more so from the south side of the Republican River, that kind of thing, but I think they all had base flows that supported the stream flow.

- Q You don't know which is -- was or is more predominant?
- A I would say ground— -- the base flows related to groundwater were a significant portion of the stream flows.
 - Q Were? Prior to 1960?
- 15 A Yes.
 - Q And you don't believe they are any longer?
- A No, I don't.
 - Q So if I understand what you are saying, the river went from being a base flow dominated system to now, a surface flow dominated system?
 - A Yes to a runoff event kind of thing.
 - Q Runoff dominated.
 - A And it's certainly more pronounced to the west, the upper basin, more so than the lower, I guess.
 - Q Closer to the Colorado border; is that what you

	Marv Swanda direct 32
1	are saying?
2	A Yes. I would say from the McCook area to the
3	west.
4	Q Okay. And so now the system is predominately
5	fed by runoff. I'm going to hand you a document that I
6	located on the Bureau website.
7	THE REPORTER: What was the name of the
8	website?
9	MR WILMOTH: The Bureau website. I'm sorry, if
LO	you look at the bottom of the website I'm sorry, if
L1	
	you look at the bottom of this exhibit, you will see a website number.
L2	
L3	THE REPORTER: Thank you.
L 4	(Exhibit No. 12 was marked for identification.
L5	See Index.)
L6	Q (By Mr. Wilmoth) Are you If you could,
L7	please, just take a moment and familiarize yourself with
L 8	this document.
L9	A (Witness examining document)
20	Q Just let me know when you've had a minute.
21	A Yeah.
22	Q Generally speaking, do you know what this is,
23	or what this represents? Can you elaborate?
24	A I think in the final settlement stipulations
25	there was a during those discussions there was a lot

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of discussions back and forth. The United States was certainly interested in knowing the effects of conservation activities throughout the basin as far as consumptive use related to the activities. And what I believe came out of that was, there was an agreement by the three states, and the United States, to fund a study to look at the effects of land terracing in small ponds throughout the Basin related to consumptive use of water and the runoff effects of that.

Q And is this summary generally represent that study or some effort towards that study?

A I believe so. It's in the -- I think this is the final year of that study coming up is the five-year study.

Q And I don't know if you were present, but I believe that I asked Mr. Thompson whether he knew of any preliminary findings of that effort, and I believe he did not. If you would look at the first two sentences of the narrative below the bulb it indicates that there are about 1.7 million acres of terraced fields, and that these projects may be depleting the national water supply of the basin by 175,000 acre feet a year, or nearly 50 percent of the historic flow measured at the Republican River near Hardy.

Do you have any reason to doubt those numbers?

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A I would say the study is not complete yet. I couldn't speak to it, you know I was -- I've been involved in listening to some of the updates on the study, particularly last year by Jim Koelliker from the State of Kansas and Derrel Martin, and so I couldn't answer one way or the other.

- Q You are not participating in that study?
- A No, I've been involved just from again, on the periphery of this study and not directly involved in it.
- Q Has anyone in your office been involved in that?
- A Kind of -- somewhat, one or two on my staff, but not directly involved in that. I think it's being conducted pretty much by the states. The United States is supplying funding to assist with that.
- Q The United States meaning the Bureau of Reclamation?
 - A Yes.
- Q How about the Natural Resource Conservation Service, NRCS?
- A They were involved early on. I don't know how much involvement they had currently, or -- I know there was involvement by the NRCS early on, but not so much, I don't think as the study progressed.
 - Q Is it your understanding that the NRCS was in

Marv Swanda -- direct 35 fact at one time quite a proponent of these conservation 1 2 measures? 3 Yes, I'm aware of that. 4 So aside from these being preliminary numbers, 5 you have no reason to doubt their authenticity? 6 I have no reason to doubt or approve them, 7 either one. That's fair. 8 Q 9 MR. WILMOTH: Ouestion? 10 MR. DRAPER: I just -- repetitive questioning, 11 but I think he took care of it. 12 (By Mr. Wilmoth) I asked Mr. Thompson, and I'd Q 13 like to ask you about your personal involvement with the 14 RRCA? 1.5 Α Okay. 16 Do you have any personal involvement? Have you 17 participated in the RRCA meetings? 18 Yes, I have since probably 1995 when I became 19 the Water Operations Chief, and since then every year. 20 Certainly participate in the annual meetings in most of 21 the other public-type meetings, I many involve around 22 those -- or be involved with those. I usually provide a 23 presentation at the annual meeting. 2.4 And what does that presentation involve? Q

It involves all of our information and data

Marv Swanda -- direct

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related to our reservoirs and our project operations, that kind of thing.

Q These are not the January projections though, are they?

A No, it will involve things like that, but it will speak to the previous years, water supply numbers and delivery numbers, and all that kind of thing.

Anything pretty much related to water.

In the Republican Basin we try to capture in a presentation at the annual meeting.

 ${\tt Q}$ And the annual meeting is usually is like summer, or --

A It used to be in June of every year, but of late, it's in August, I believe. And I also participate in -- usually there's a meeting prior -- a technical meeting I think they refer to it, a working session prior to that. I think I've attended most all of those.

Q And are these the engineering committee meetings; is that what you are referring to?

A I believe that's probably correct.

Q And do you present data or interact with those individuals?

A Yes, we have when it involves -- we may be on the agenda for whatever reason to provide information to the business folks.

Marv Swanda -- direct

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- Q Information related to the water supplies in the basin or --
 - A Yes.

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- Q -- to the projects?
- A Projects, yes.
- Q But you don't provide any information outside the context of those issues, water supplies for Bureau projects?

A Yes, we provide all of our annual data related to all of our projects. There's -- you know, we keep quite a list of records, official water records, deliveries, reservoir elevations, you name it. That's all provided to the Compact states, and then it's -- a lot of it's in conjunction with what we feel is required of us by the states on keeping water records, that kind of thing.

- Q Are you involved at all in the Compact accounting process?
- A No, other than providing the data needed for some of the reservoir -- or Bureau projects.
- Q Are you familiar at all with the Compact accounting procedures? Do you know what I mean when I refer to that?
- A Yes.
- 25 Q Yes, you're familiar with it?

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- A Yes. Not deeply familiar with it, but I --
 - Q One of the things that Mr. Thompson mentioned was that one of the things the Bureau projects do is they have an influence on the hydrology of the system. I assume you would agree with that?
 - A Yes.
 - Q Generally? One of those influences is evaporative losses?
 - A Yes.
 - Q Do you have any idea the scale of those losses?
 - A I would say it depends on the year, it depends on --
 - Q How about in an average year?
 - A For example, I would -- the number that I think I'm pretty familiar with is Harlan County. If it was a full reservoir in a normal year, you'll see somewhere in the neighborhood of 40,000 acre feet of gross -- or evaporation at that particular lake, depending on, you know, and the other reservoirs. It's all dependent on how much surface area you have, how much evap, but each one -- we certainly keep records.

We have visual weather stations in all of them. We accumulate the data and compute the evap.

Q And is that evaporation date supplied to the RRCA?

	Marv Swanda direct 39
1	A Yes.
2	Q To the engineering committee?
3	A Yes.
4	Q For all of the facilities?
5	A Yes.
6	Q Okay, in total?
7	A Yes.
8	Q Do you have any idea, ballpark percentages, how
9	that evaporation loss relates to the total water supply
10	in the basin? Is it ten percent, twenty percent?
11	A I
12	Q In an average year.
13	A I would guess it's I would say ten percent,
14	but that's just a guess without actually looking at it.
15	Q And how is that accounted for in the accounting
16	procedures?
17	A I believe it's in there I believe it adds on
18	to the virgin water supply, I believe that amount, and
19	then it's allocated out to each particular state
20	depending on how the accounting procedures define it, I
21	think.
22	Q And Mr. Thompson indicated that he had had no
23	prior dealings with the State of Kansas in regard to this
24	matter; is that true of you also?
25	A That's correct.

	Marv Swanda direct 40
1	Q And when were you first approached about
2	appearing as a witness in this matter?
3	A I think the first that I became aware of it was
4	probably mid-to-late January maybe, not exactly sure,
5	but
6	Q And what information did you review to prepare
7	for this proceeding?
8	A I reviewed, of course all of the information
9	pretty much all of the information that was supplied in
LO	the Touhy request. I reviewed some of the DPR documents.
L1	Q Did you review any of the materials that were
L2	submitted to the arbitrator in this proceeding?
L3	A Very cursory, at best.
L 4	Q By that, I really mean the expert reports, not
L5	all the legal mumbo-jumbo.
L 6	A Yeah. Not even so much those. I just didn't
L 7	have time.
L 8	Q So I infer, then, that you have no opinion
L 9	about the those reports?
20	A No.
21	Q One quick clean-up matter on Frenchman Valley.
22	A Yes.
23	Q I had asked Mr. Thompson if he knew
2.4	approximately what was remaining on the repayment

obligation for Frenchman Valley. Do you know the answer

	Marv Swanda direct 41
1	to that question?
2	A The capital repayment?
3	Q Yes. And just for the record, could you
4	identify what you are referring to there?
5	A These are my personal notes. I don't think
6	that I have that with me.
7	Q Mr. Thompson, I thought, explained that
8	probably more than half had been paid off. Do you think
9	that's in the ballpark?
LO	A That's probably I would think that
L1	Q What about the Bostwick division?
L2	A I think that's probably which we submitted
L3	is part of this in the contracts that are in these
L 4	documents.
L5	Q The remaining balance?
L 6	A Yes, it's in the it lays out the payments.
L 7	Now there was some restructuring of the capital
L 8	repayments, I think, that would not be in there, but the
L 9	total amounts probably, I'm thinking is captured in the
20	contract for whichever particular irrigation district.
21	Q Were you in this office when Nebraska purchased
22	I'm sorry, when the Republican River Coalition
23	purchased water rights and had them sent down the system?
24	A Yes.

Q For Compact compliance?

	Marv Swanda direct 42
	Mary Swanda Wirect
1	A Yes.
2	Q And that occurred in 2007; is that correct?
3	A Okay, which one, there's three.
4	Q Sorry. Let's talk about 2007.
5	A Okay.
6	Q And I'd like to just provide you with a
7	document that was in the Touhy request response it
8	begins with Bates No. 342. If you could just have a peek
9	at that?
10	This will be Exhibit No. 13.
11	(Exhibit No. 13 was marked for identification.
12	See Index.)
13	Do you recognize this document?
14	A Yes.
15	Q (By Mr. Wilmoth) Could you explain, generally,
16	what this document is?
17	A I believe it was the Nebraska Department of
18	Natural Resources documenting how the accounting of those
19	water agreements, how those would occur in 2007.
20	Q And to the best of your knowledge, was this
21	transfer effectuated?
22	A Say that again, please?
23	Q Was this purchase and transfer down the system
24	effectuated?
25	A Yes

Marv	Swanda	 direct

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Q And were there any problems with that that you want to articulate for us today?

A I don't think there was. We worked closely with DNR at the time with helping, you know, because we were part of the making the accounting happen and providing that kind of data to DNR, so --

(Exhibit No. 14 was marked for identification. See Index.)

Q Sure. And then I'd like to provide you with Exhibit 14. This too is from the Touhy request. If you could just identify this document very briefly? And I'm sorry, I should say not the electronic communication, but the attachment is what I'm most interested in.

A Oh, okay. It was an order from the Department of Natural Resources that we, the United States, could store all the inflow in Harlan County except the protected Frenchman Valley and the Riverside purchased water.

- Q And to your knowledge, did that occur?
- A I believe that was pretty much how it happened, yes.
- Q Thank you. And then finally, I will give you Exhibit --

(Exhibit No. 15 was marked for identification. See Index.)

1 THE REPORTER: Fifteen.

Fifteen, which I believe is an electronic communication which you received from Mr. Peck?

A Yes.

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- Q Could you identify this document for me please?
- A It's from William Peck who is the -- now the supervisor of water operations group who works under me, and he was documenting the Harlan County estimated purchase of water on August 10, 2007.
- Q Right, and if I look down here, I see three different -- three numbered statements. The first one is not necessarily Harlan County water, is it?
- A The first one is FV, that is Frenchman Valley water, and Riverside is Riverside Irrigation District, and it's those agreements with those two districts.
 - O And the second one was Frenchman Cambridge?
- A Yes, that's the water that was reassigned from the Frenchman Cambridge Irrigation District to the Kansas Bostwick Irrigation District. The initial amount was 26,000 acre feet. I believe the 14,000 represents the consumptive use portion of that.
 - Q And third, is that the Bostwick water?
- A That's correct. Nebraska Bostwick Irrigation District's water.
 - Q Very good.

Marv Swanda -- direct 45 Α Out of Harlan County. 1 2 0 And so how much water was sent through the 3 system this way for the benefit of Compact compliance, I should say? 4 5 This -- Okay, I think, first, I would say what 6 you have here is -- it was not a final accounting. 7 Q Okay. 8 Α It was an estimate at the time. 9 Q Sure. 10 And I would reply that I don't think that it Α 11 was our responsibility to account for Compact compliance, 12 that would be a question for the State of Nebraska, I would think. 13 14 Okay, fair enough. How much water was 15 identified as being released? 16 Going through just Frenchman Cambridge water? 17 Yes, well, just the total, if you would. 18 Okay the total estimated release requested by Α 19 Kansas Bostwick was approximately 22,500. I think it 20 ended up being a lesser amount than that. 21 And there's a reference to carry over water by Q 22 Kansas Bostwick?

Yes, what that was is if this water that was

assigned could not all be used up in that year, then

there was a provision to carry that over in Harlan

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Marv Swanda -- direct 46 County. 0 And that would be retained for the sole benefit of Kansas Bostwick, is that right? That is correct. Α So that would not be re-split? 0 No, that amount would not. The only caveat was that is if the reservoir refilled the following year, this amount could go away, and in fact, it did. And what does the next statement mean; "Kansas Bostwick also benefitted from at least 5,000 acre feet of natural flow." Okay, that was related to -- in the agreement Α with Nebraska Bostwick, they also allowed the natural flow that was estimated to be available for Superior Canal. And typically we would estimate there's 5,000 acre feet available for that, so they gave up that right to that water so that could be taken on to Kansas Bostwick. And if you could just look at the final note, an additional 10,000 acre feet. Do you see that statement? Α Yes.

What does that mean?

Okay, that would represent -- Im my mind, that

represents the difference between the 26,000, which was

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the number used for the purchase or transfer. That's the difference between that and the consumptive use portion that was protected. And, in addition, I would add that there could have been some other natural flows pick up that could have been in that number also, but it would appear that as best as that water was accounted for and tracked that year, we were thinking it was in the 10,000 acre foot area.

- O And that's natural flow?
- A That was -- yes, that was inflow to the reservoir as a result of the release from Harry Strunk.
- Q I infer from your earlier comments though that that was not an intentional release?
- A No, that was part of the 26,000 related to the difference between the consumptive use and the rest of the water.
- Q I have what we'll mark as Exhibit 16.

 (Exhibit No. 16 was marked for identification.

 See Index.)

Again, derived from the Touhy request response. Would you just take a look at this document. I intended to ask Mr. Thompson about this but then I realized that perhaps it predated his arrival, and I also noted that it had your name on it at the end as a cc, so you drew the short straw.

	Marv Swanda direct 48
1	A It's not the first time.
2	(Laughter)
3	MR. CHAFFIN: For the record?
4	THE REPORTER: Yeah.
5	Q (By Mr. Wilmoth) I would Well, let me ask.
6	Do you recall this document?
7	A I believe I do.
8	Q Did you participate at all in the creation of
9	this document?
10	A I would suspect I probably did.
11	Q And I would direct your attention to the last
12	page. There's a heading called Reclamations Role Pos-
13	I'm sorry. Strike that, I'm just getting tired
14	"Reclamations Position/Role." Could you read those eight
15	points briefly, and my question to you is whether or not
16	Reclamation's position or role has changed substantially
17	since those statements were made.
18	A I think I can read them. The question, if I
19	can comment on them or not.
20	(Conferring with Counsel off the Record)
21	Q Oh, I maybe let me clarify. I'm not asking
22	into the future, I'm asking as we sit here today, is
23	there any reason to believe
24	A I don't think it makes a difference.

Let me ask it this way. Let me try it again.

Marv Swanda -- direct

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For the record, I'll understand that Mr. Swanda's been instructed not to respond to that particular question due to the prior limitation; however, I will try to rephrase it. Was there any change in Reclamation's position overall between 2006 and when this document was created, and January 1 of 2009?

(Conferring with Counsel off the Record)

THE WITNESS: So, your first question to read through these?

MR. WILMOTH: Take your time if you need to. The fundamental question is whether this position and role as articulated in this document dated 2-2006, substantially changed between the date of this document and January 1, 2009.

MR. DRAPER: Would this be a good time to take a break?

MR. WILMOTH: That would be fine.

Off the record.

(Off the record from 2:44 p.m. to 2:58 p.m.)

Q (By Mr. Wilmoth) So, Mr. Swanda, back to it, the question relates to these eight points.

A To my knowledge, this is still appropriate, I guess.

Q Okay.

A The only one I might notice, number eight, I'm

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not sure what that is, whatever LB that applies to.

- Q All right, fair enough. So with regard to the first one, fulfilling commitments under the Compact Settlement Agreement, that doesn't relate to water delivery requirements or anything like that; is that right? It's just these three things listed underneath there?
 - A I believe that's correct.
- Q And that's essentially supporting studies and other things?
- A Yeah, I think it's -- Yeah, A would apply to the conservation study that is ongoing with the five year study.
- Q And did I understand you to say that would be complete sometime within the year?
 - A I believe it's to be completed in 2009.
 - Q Okay.
- A B is a -- I believe that's related and this is also in the FSS that we agreed to do a it's called a Lower Republican Study for improvements, that kind of thing; and C, I think that's related. That's a State thing though, not United States necessarily.
 - Q Okay, so you're not involved in that directly?
- A No, not directly, no.
 - Q And number two almost speaks for itself,

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avoiding further Compact litigation. I infer from that that you mean making sure the United States stays out of litigation?

- A I assume that's what that means.
- Q And I don't blame you for that. I'm interested in points three and four.
- A Three, I believe if we -- as far as I know we are willing to listen to discussion concerning how the United States can help in this but it needs to be within our authorities in our contract obligations, those kind of things.
- Q So, for example, if there's any activity that one state suggests that adversely impacts the water supply to a federal project, the Bureau would not be supportive of that?
- MR. CHAFFIN: Mr. Wilmoth, I really think this line of questioning is something that Mr. Thompson would be more than happy to be recalled and go into; the philosophy behind each one of these parts. Mr. Swanda really isn't in a position to answer those kinds of things.

MR. WILMOTH: And that's fair enough, and again, I -- as I mentioned I thought this predated Mr. Thompson and perhaps it would be not fair game to ask him questions about it, but I don't have a problem with doing

particular NRD, depending on the area you're talking

about, and the Nebraska Department of Natural Resources,

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dealing with the interaction of groundwater and surface water. Some of the main goals is to assure a balance of the water use; sustainability; ensuring that there's equal treatment, be it surface water or groundwater user, that kind of thing.

Q Do you agree with Mr. Thompson's assessment that the IMPs will not adequately keep Nebraska in compliance?

A I believe it will be very difficult with the allocations that are currently in those IMPs to ensure long term compliance with the Compact.

Q And Mr. Thompson indicated that he relied principally on information supplied by the Department of Natural Resources from Nebraska to draw that conclusion. Did you do the same?

A Yes, there would have been -- we would have reviewed that kind of data probably along with the output data from the groundwater model, Compact groundwater model, those kinds of things.

Q Are these model runs that you conducted or that the RRCA conducted?

A No, the RRCA.

Q Okay, so you performed no independent analysis of the effectiveness of the IMPs?

A That's correct. We just looked at the

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available information from those sources.

Q And do you have an opinion on the level of groundwater reduction that would be required to maintain Compact compliance?

A I could not sit here and probably give you a number. I would say that it needs to be a significant reduction from what's currently in there for their allocations. I can't tell you that it's five inches or seven inches. There's enough factors involved in the NRDs, the areas are enough different, but from what we've reviewed, we feel that it has to be significantly smaller allocations than that that are currently in there to ensure that we have water available in our projects for those projects to operate, in that they assist with Nebraska meeting Compact compliances by operating our projects. And in order to do that, we don't think the current allocations will allow for those surface waters to be available.

- Q And in order to do that, are you suggesting that the base flow needs to be restored to some level?
 - A Yes, I believe that's correct.
- Q And in order to do that, do you suggest that the groundwater levels need to recover to some level?
- A I believe that's a direct correlation to the groundwater levels and the surface water that will

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appear, base flows that will maybe appear if there is a connection with groundwater levels and the stream bed, that kind of thing.

Q Uh-huh, but you don't understand the Compact to require anything about groundwater levels either, do you?

A I understand that they will account for any depletions caused by groundwater will be in the Compact accounting in the accounting method to account for those depletions, stream flow depletions.

Q But do you understand the Compact to be a surface water Compact, principally?

MR. DRAPER: Are you asking him a -- the legal question that was at the core of the suit as to whether groundwater impacting surface flows needs to be considered?

MR. WILMOTH: No, no, no. What I'm asking is, when he's suggesting that the IMPs won't achieve Compact compliance, does he believe that Compact compliance has any groundwater component, or is it a surface water compliance test.

A I don't think that's the question that I can answer.

Q (By Mr. Wilmoth) Because you don't know the answer, or because I didn't ask it well? I'll accept either one.

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My question is, are there any tests that you're aware of under the Compact that speak to groundwater specifically, or is it simply a measurement of surface flow at certain gages or locations?

 $$\operatorname{MR.}$ DRAPER: Are you asking him separate from the FSS, which has --

MR. WILMOTH: I'm just asking him his understanding whatever it's based on. It's not a legal question. I'm just saying when he's talking about an opinion that the IMPs cannot achieve Compact compliance, how does he define Compact compliance? What's his understanding? He may be legally correct or incorrect, I don't care.

A I believe there's surface water Compact stations that are indicated in the Compact. I believe the surface water is accounted for in the current accounting process and procedures.

Q So to borrow a phrase from my colleague, Mr. Ampe, is that another way to -- a short way to say that it's a surface water Compact, in your understanding?

- A I would say, yes.
- Q Okay, thank you.

 Did I get that right, Pete?

 MR. AMPE: (Gesturing)
 - Q (By Mr. Wilmoth) And you'd mentioned earlier,

and I believe Mr. Thompson mentioned earlier that there were multiple factors contributing to the decline in surface flows into the projects?

A Yes.

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Q And some of those things might include groundwater pumping; some of them may be conservation, but for -- conservation measures, but for clarity of the record, you don't know the relative responsibilities of those two factors or any other factors?

A No, I would say with -- in my opinion groundwater's a large share of it, but there's also other impacts from conservation practices, that kind of thing.

MR. WILMOTH: If I can just take two minutes to confer with these guys, I think we might be done.

It may be anti-climatic, but we have nothing further for this witness. I would like to spend five minutes with Mr. Thompson again if that's all right with you, Mr. Chaffin, regarding this particular document.

MR. DRAPER: And we need to think first about Colorado and Kansas for any further --

MR. WILMOTH: Oh, I'm sorry, it's my mistake MR. AMPE: I don't have any questions.

MR. DRAPER: Okay, well, I'd like to take -- yeah, why don't we take a break and I'll see what I have for Mr. Swanda.

Marv Swanda -- cross

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1 (Off the record from 3:12 p.m. to 3:19 p.m.)
2 MR. DRAPER: Okay, if we could go on the
3 record. I have a question.
4 CROSS EXAMINATION

BY MR. DRAPER:

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Q Mr. Swanda, good afternoon. You were asked by Mr. Wilmoth about the contracting for surface water supplies in 2005, 2006 and 2007. Was the State of Kansas involved and asked to participate in any of those discussions or transactions?

A I don't believe they were directly, or indirectly, probably. You're talking the 2006 agreements?

Q Yes.

A No, I don't believe -- I think there was some discussion after the fact kind of thing.

 $$\operatorname{MR.\ DRAPER:}$ I don't have any other questions. Thank you very much.

MR. WILMOTH: Do you wish to read and sign?
Were you here when we talked about that with Mr.
Thompson? I assume you would like to handle that the

same way, the read and sign if you would just indicate you would like to read and sign.

THE WITNESS: I would like to read and sign.
THE REPORTER: Thank you.

	I	I
	Marv Swanda cross	59
1	(Concluded at 3:21 p.m. on April 7, 2009)	
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	CERTIFICATE OF WITNESS
	DEPOSITION OF MARV SWANDA
	Taken April 7, 2009
	I certify that I have read my deposition
referen	ced above and that discrepancies, if any, are
listed	by page and line numbers as follows:
PAGE	LINE CORRECTION AND/OR REMARKS
	Signature of Witness
	Subscribed and sworn to before me this

Notary Public

day of April, 2009.